

No. 33,634. Grain Harvester. (Moissonneuse.)

The Massey Manufacturing Company, Toronto, Ont. (assignee of William N. Whately and William Bayley, Springfield, Ohio, U.S.), 8th February, 1890; 5 years.

Claim.—In the main driving gearing, of a harvester, the transverse counter shaft *d* having upon it the main pinion *D*, the two boxes *F, d*, one on each side of said pinion which engages the main gear-wheel fixed to the main driving and supporting wheel, the said boxes being formed on one piece of cast metal fixed to the main frame and projecting inwardly therefrom, said inwardly-projecting part being provided with a seat adapted to be secured to, and supported by diagonal brace *d'* fixed to the side and rear sills of the main frame, substantially in the manner and for the purposes shown and described.

No. 33,635. Grain Binder. (Lieuse à grain)

The Massey Manufacturing Company, Toronto, Ont. (assignee of William N. Whately, Springfield, Ohio, U.S.), 8th February, 1890; 5 years.

Claim.—1st. In the knotting mechanism of an automatic grain binder, the combination of a tyer-wheel, a cam-track thereon having a cut-away portion, a tyer-bill, a tyer-bill pinion having a flattened portion adapted to engage with said cam-track, a projection on the tyer-bill gear, and another cam-track on said tyer-wheel with which said projection engages, said parts operating, substantially as set forth, to permit backward rotation of the tyer-bill within proper limits for the purpose of facilitating the shedding of the knot. 2nd. In the knotting mechanism of an automatic grain-binder, the combination, with the tyer-bill revolving backward to allow the force of the discharging bundle to strip the knot from said tyer-bill, of a projecting lug carried by the tyer-bill shaft, a tyer-wheel, and a suitable cam against which said lug rests for the purpose of confining the backward revolving movement of the tyer-bill within proper limits. 3rd. In the knotting mechanism of an automatic grain binder, a spring-cam for closing the tongue of the tyer-bill, provided with a front extension inclined to act as a guide for assisting in guiding the cord to its proper position across the tyer-bill, for the purpose of facilitating in tying of the knot. 4th. In the knotting mechanism of an automatic grain binder, a vibrating knife-arm and cord-guide having a downward-projecting ridge formed upon its under side, in combination with a tucker-finger, substantially as and for the purpose set forth.

No. 33,636. Car Wheel. (Roue de char.)

James N. Weikly, Jersey, N.J., U.S., 8th February, 1890; 5 years.

Claim.—1st. A car wheel consisting of the combination of a wrought metal hub *C*, a cast felloe *D* and a tire *E*, constructed and combined, substantially as set forth. 2nd. The combination of a car wheel with its cast metal felloe *D* formed with a radially-corrugated web of sinuous contour, having its greatest sinuosity at its junction with the rim, substantially as described. 3rd. The combination of a car wheel *B* and axle *A*, united in substantially the manner set forth. 4th. The combination, with axle *A* and wheel *B*, of a thrust-washer *G*, united to the wheel in substantially the manner specified. 5th. The combination, with the wheel having its separate tire *E* fastened by screws *a*, of locking plates *N* embracing the heads of the screws and prevented from turning by a shoulder *t* and spring-washer *u* for holding said plates, substantially as set forth.

No. 33,637. Process of Loosening and Softening the Texture of Wood and other Ligneous Material. (Procédé pour relâcher et amollir les fibres du bois et autres matières ligneuses.)

Hermann Schulte, Vienna, Austria, 8th February, 1890; 5 years.

Claim.—1st. A process of loosening the cellular tissue of wood and other ligneous materials, this process consisting in impregnating the wood or other ligneous material with solutions of sulphites of hyposulphites, more especially of sulphite or hyposulphite of soda, or of caustic soda, or basic soda-salts, or with mixtures of the said solutions, and in afterwards heating the wood or other ligneous material during several hours to a temperature of from 230 deg. to 290 deg. Fahr. with that portion of the solution only which has penetrated into the cellular tissue, in consequence of the impregnation or in boiling the impregnated wood or other ligneous material with the aforesaid solutions in a closed vessel during several hours, substantially as and for the purposes set forth.

No. 33,638. Ink Bottle and Attachment.

(Encrier et accessoire)

Nelson Johnson, Knoxville, Penn., U.S., 8th February, 1890; 5 years.

Claim.—1st. In combination with an ink bottle, two or more transverse ribs or projections formed radially across the head or shoulders of the bottle for supporting a pen, substantially as herein described. 2nd. The combination, with an ink bottle having two or more transverse projections or ribs formed on its head, of a hinged cap having corresponding grooves or depressions, whereby the same is adapted to close tightly upon said head, as shown, the said ribs and depressions serving for the support of the pen-holder when the bottle is open, as herein set forth. 3rd. An ink bottle having a number of upwardly-extending pins or projections on its shoulder, substantially as and for the purpose set forth. 4th. An ink bottle having on its shoulder a number of upwardly-extending perforated pins or projections arranged circumferentially, as and for the purposes set forth. 5th. An ink bottle having a number of pins or projections on its shoulder extending upwardly and inclined inwardly, as and for the purpose set forth. 6th. The combination, with an ink

bottle, of a horizontal annular flange or collar surrounding the same, said flange having perforations for the insertion of pins, for the purpose set forth. 7th. The combination, with an ink bottle, of a collar thereon having a number of upwardly-extending projections, for the purpose herein set forth. 8th. The combination, with an ink bottle, of a collar having a horizontal portion and an upturned portion or flange, said upturned portion being serrated or notched, and the said horizontal portion being secured to the neck or shoulder of a bottle. 9th. The combination, with an ink bottle, of a collar 4 consisting of horizontal portion 4a, upturned serrated portion 4b, and set projections 15 for supporting it on the neck of the bottle, as set forth. 10th. In combination with an ink bottle, a collar 4 consisting of the horizontal portion 4a, upturned serrated portion 4b, and spring projections 15 for supporting the collar on the bottle, said projections being secured around the neck of the bottle by a wire 16, as set forth. 11th. In combination with an ink bottle, a collar 4 consisting of the horizontal portion 4a, serrated portion 4b, and spring projections 15 for supporting the collar on the bottle, substantially as set forth. 12th. An ink bottle having formed integrally therewith a circumferentially-arranged series of substantially vertical projections, substantially as described. 13th. A dipping attachment for ink bottles, consisting of the tube 18 fitting to said bottle and having overlapping edges, whereby the same is rendered collapsible, substantially as described. 14th. In combination with an ink bottle, a tube 18 fitting in said bottle, and having a spring 18b coiled on it and confined between the flange 18c and mouth of the bottle, as herein set forth. 15th. In a dipping attachment for ink bottles, the combination of the conical thumb 18 and the springs 19 secured thereto, substantially as and for the purpose set forth.

No. 33,639. Medical Compound to Aid and Hasten Digestion and Prevent and Cure Dyspepsia. (Préparation médicale pour favoriser et activer la digestion et prévenir et guérir la dyspepsie.)

Pierre L. Brault, St. Jean, Qué., 8th February, 1890; 5 years.

Résumé.—Le mélange de bi-carbonate de soude, d'extrait de taraxaques, de teinture de gèniéane et d'eau, dans les proportions et pour les fins décrites.

No. 33,640. Receptacle for Packing for Car Axle Boxes. (Réceptacle à étoupe pour les boîtes à graisse.)

Hamilton Rogers, Toledo, Ohio, U.S., 8th February, 1890; 5 years.

Claim.—1st. In combination with a car axle box, a sectional receptacle for packing, as and for the purpose set forth. 2nd. A receptacle for packing for car axle boxes, formed of sections having a central channel and wings at an angle thereto, as and for the purpose set forth. 3rd. A receptacle for packing for car axle boxes formed of sections, each section having an end portion provided with means for preventing the sections from telescoping, as and for the purpose set forth.

No. 33,641. Apparatus for and Method of Preserving and Purifying Milk.

(Appareil et mode de conservation et de purification du lait.)

John T. Appleberg, Knoxville, Tenn., U.S., 10th February, 1890; 5 years.

Claim.—1st. The herein-described apparatus for purifying and preserving milk by heating the same, consisting of a series of boxes which are adapted to contain a movable milk receptacle, said boxes having hinged tightly fitting doors and covers, and provided near the bottom with a coil of pipe adapted to support the milk can or the receptacle, and having a packed aperture in the hinged cover for the insertion of a thermometer or indicator, the several coils or supports of pipe, one for each box, communicating with one another to permit the flow of steam through the entire series, substantially as and for the purpose set forth. 2nd. The herein-described method of purifying and preserving milk by sterilizing the same while in its natural state, by subjecting it within an air-tight closed receptacle to a steam heat commencing at or about 160 deg. Fahrenheit and to a steam heat gradually raising the heat to 185 deg. more or less, the slowly or gradually raising the heat to 185 deg. more or less, the initial point of 160 deg. being started very rapidly in the first instance to prevent separation of the milk, and then increased gradually until the maximum point has been reached, said maximum point being always below the boiling point of milk, substantially as and for the purpose set forth. 3rd. The hereinbefore-described process of purifying and preserving milk by sterilizing the same while in its fresh or natural state, which consists in, first, placing the milk in suitable open cans or vessels, secondly, placing these cans within closed and air-tight boxes or receptacles, thirdly, rapidly raising the temperature of the cans or receptacles, fourthly, slowly air tight receptacles to about 160 deg. Fahrenheit, fourthly, slowly increasing the temperature to about 185 deg., and maintaining it at that point or at a point below the boiling point of milk 212 deg. Fahrenheit for a sufficient length of time, and lastly, removing and sealing the cans and slowly cooling their contents, substantially as and for the purpose set forth.

No. 33,642. Steam Engine. (Machine à vapeur.)

Jerome Wheelock, Worcester, Mass., U.S., 10th February, 1890; 5 years.

Claim.—1st. In valves for steam engines, a shell containing the seats for both out off and exhaust-valves, substantially as described. 2nd. In valves for steam engines, the combination, with a sliding valve and its operating-shaft, of a bent link, substantially as described and for the purpose set forth. 3rd. The combination,